

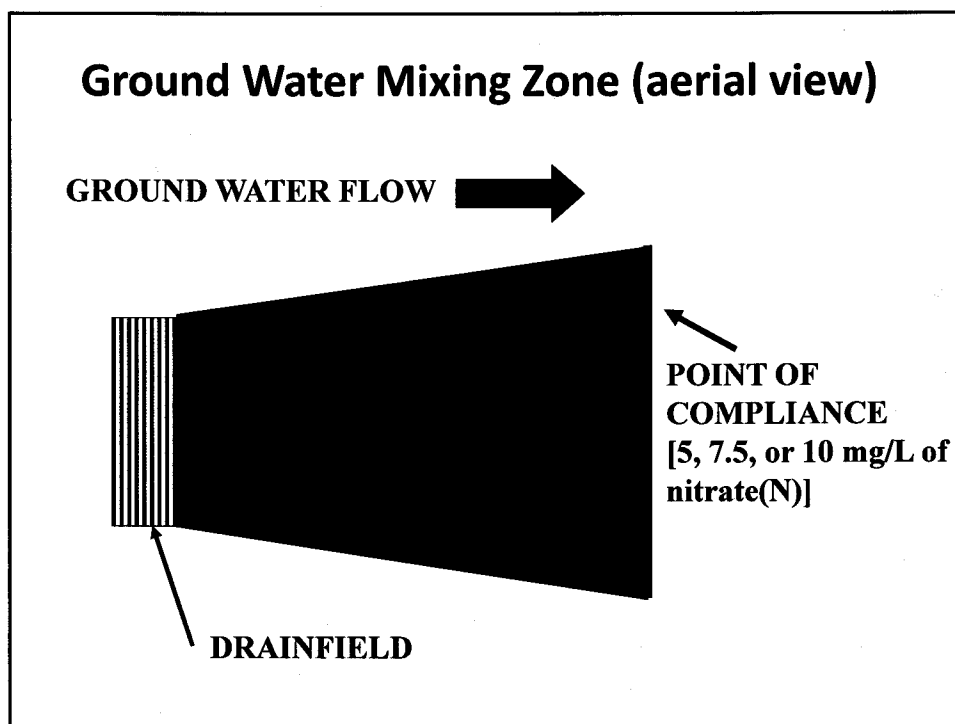
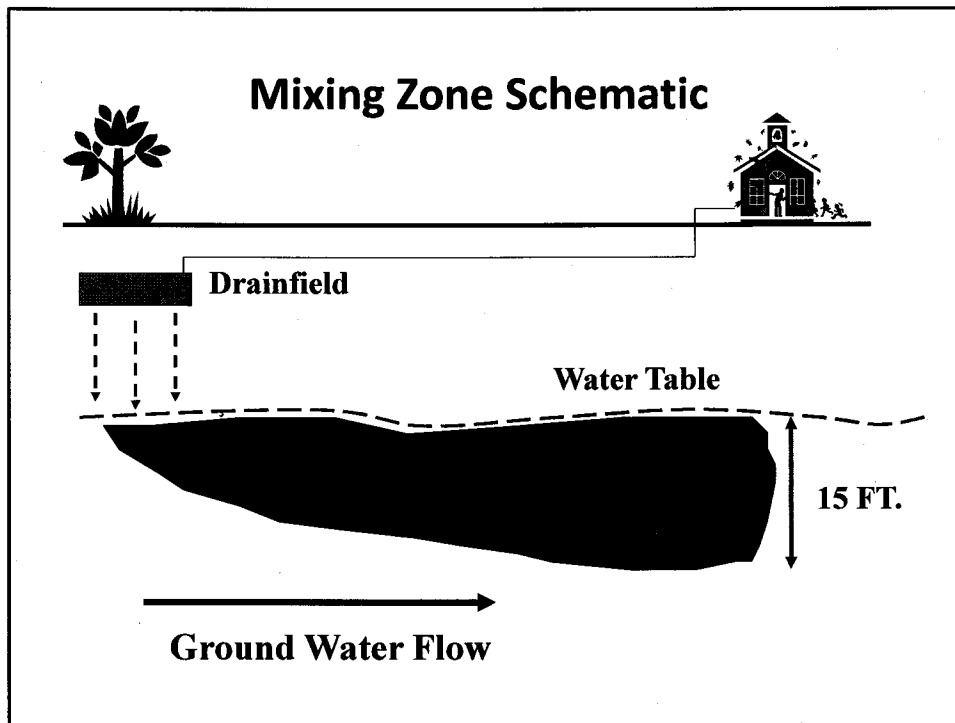
Steve Kilbreath
Montana Department of Environmental Quality
Subdivision Section
January 17, 2011

Testimony for HB 28.

Mr. Chairman and Members of the Committee my name is Steve Kilbreath and I represent the Montana Department of Environmental Quality. I am the Section Supervisor for the Subdivision Section; we are responsible for review of all subdivisions in the State under the Sanitation in Subdivisions Act. We review the water, wastewater, storm drainage and solid waste facilities in all subdivisions with lot sizes less than 20 acres. My program probably issues the most ground water mixing zones of any DEQ program due to the volume of subdivision that we approve.

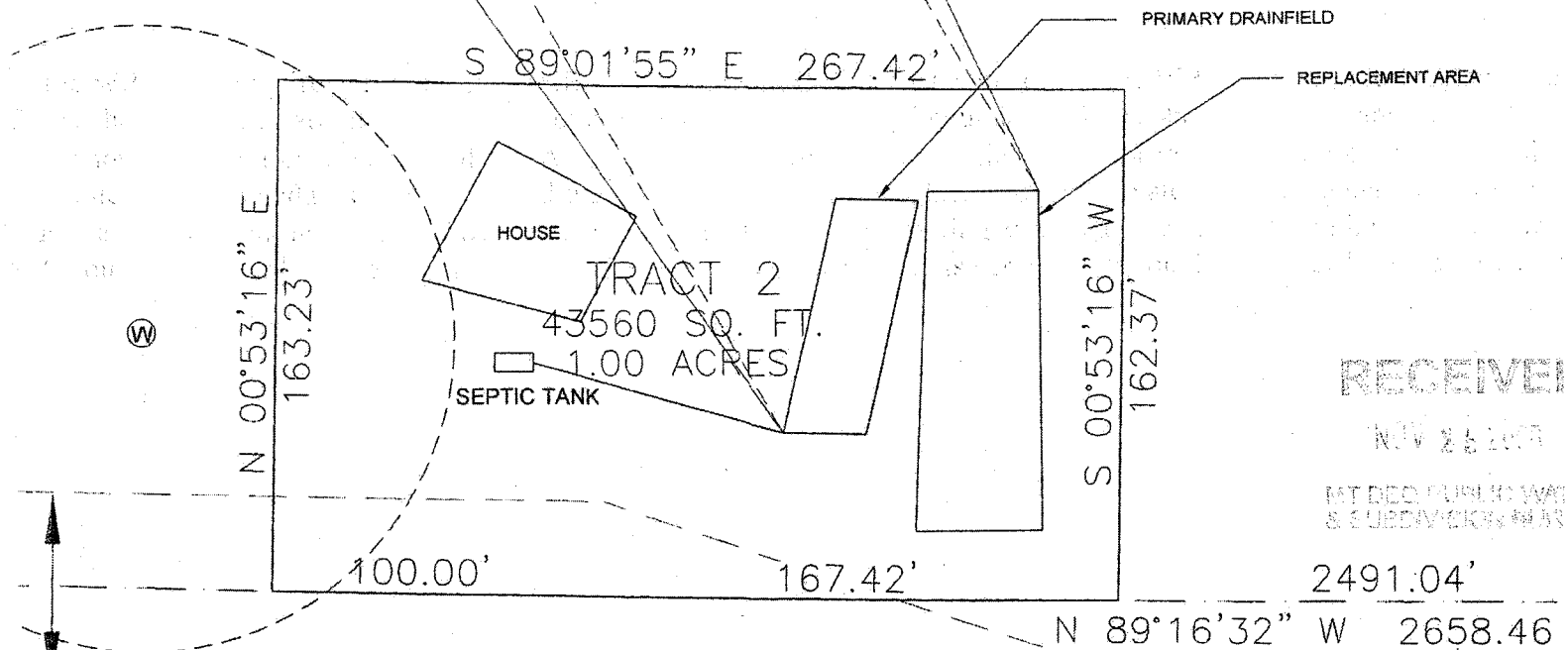
I am here today to support HB 28.

- HB 28 is a very simple bill that came out of the WPIC that requires new mixing zones stay within the external boundary of the subdivision they are in.
- A ground water mixing zone is defined as a portion of an aquifer where initial dilution of a discharge takes place and where water quality standards may be exceeded. In other words a mixing zone is an area that contamination is allowed as long as the groundwater meets certain water quality standards at the down-gradient end of the mixing zone.
- Standard mixing zones for septic systems are concerned with nitrogen and range from 100 to 500 feet in length and are controlled by lot size. Source specific mixing zones are available as an option.
- Mixing zones for septic systems have three nitrogen limits depending on what type of treatment is being used.
- By rule drinking water wells may not be placed in a mixing zones and a septic system may or may not be placed in a mixing zone if nitrogen limits are exceed by cumulative impacts.
- By keeping mixing zones confined to the subdivision or having an easement you have solved two problems.
 - You are protecting public health by eliminating new wells being drilled in the mixing zone and guaranteeing that certain water quality standards are met at the edge of the subdivision.
 - No neighbors will have mixing zones placed on their lots without their approval so you will be protecting private property rights.
- I am here to answer any questions.



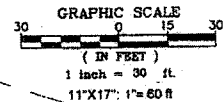
THE SOUTH HALF SECTION 18
 OF LAND GREATER THAN 160 ACRES

MIXING ZONE AS PER
 GCCHD PERMIT #15324

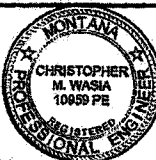


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 NOV 28 2008
 MT DEQ PUBLIC WORKS
 & SURVEY DIVISION

Reviewed By The Local Reviewing Authority
 Under Contract with the
 Department of Environmental Quality/PCD
Erin Zint 11/21/08
 Local Reviewer Date
 Accepted Under Contract
Barbara Kingery 11/26/08
 DEQ Representative Date



CEMENT
 DGE ROAD
 76

 <p>204 N. 11th Ave. Bozeman, MT 59715 Phone: (406) 581-3319</p> <p>DRAWN BY: CMK CHK'D BY: CMW APPR. BY: CMW DATE: 11/17/08 Q.A. REVIEW BY: CMW DATE: 11/17/08</p>	<p>Brouwer Property S 1/2 SEC 18 T1S R4E Manhattan MT</p> <p>Site Plan</p>	<p>PROJECT NUMBER 1022.002 SHEET NUMBER DRAWING NUMBER SP-1</p>
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NO WELLS, SURFICIAL WATER BODIES OR KNOWN FLOODPLAINS WITHIN 100 FEET OF DRAINFIELD. LOCATIONS OF MAPPED FEATURES ARE APPROXIMATE. OBTAIN COUNTY SEPTIC PERMIT BEFORE INSTALLATION. NOTE: NO UPGRADIENT OF DOWNGRADIENT DRAINFIELDS KNOWN TO EXIST. USE APPLICATION RATE OF 0.4 GPD/FT² FOR SYSTEM SIZING

SPECIFICATIONS:

- SEWER LINE: 10 LF MIN 4" DIA SCH 40 PVC, BEDDED TO INDUSTRY STANDARDS, INSULATED AS NECESSARY TO PREVENT FREEZING, & SLOPED ON MIN 1/4" / FT SLOPE. INSTALL CLEANOUT AT FOUNDATION. KEEP +50 FT FROM WELL.
- SEPTIC TANK SHALL MEET DEO REQUIREMENTS & MUST BE WATERTIGHT. KEEP +50 FT FROM WELL.
- 4" DIA SOLID PVC TRANSPORT SHALL BE PROPERLY BEDDED ON EVEN SLOPE WITH 1/8" MIN SLOPE TO CONCRETE D-BOX. SET D-BOX LEVEL, CHECK FOR EQUAL DISTRIBUTION TO ALL LATERALS AND INSULATE AS NECESSARY.
- ABSORPTION TRENCHES SHALL BE 7 FT OC, 80-FT MIN LONG, LEVEL AND 2-FT WIDE. TRENCH DEPTH SHALL BE 30-36". DISCARD HIGH CLAY SOILS FROM 8-24" AS NECESSARY AND BLEND SAND INTO FILL SOILS AS NECESSARY SO SYSTEM CAN BREATHE. KEEP DRAINFIELD AT LEAST 100 FT FROM WELL.
- PLACE WELL AS STAKED OUT. REFERENCE STAKE FOR TEST PIT SHALL BE SOUTH END OF UPHILL-MOST LATERAL.

KELLY CANYON RD

0 50 100 200
 SCALE: FEET

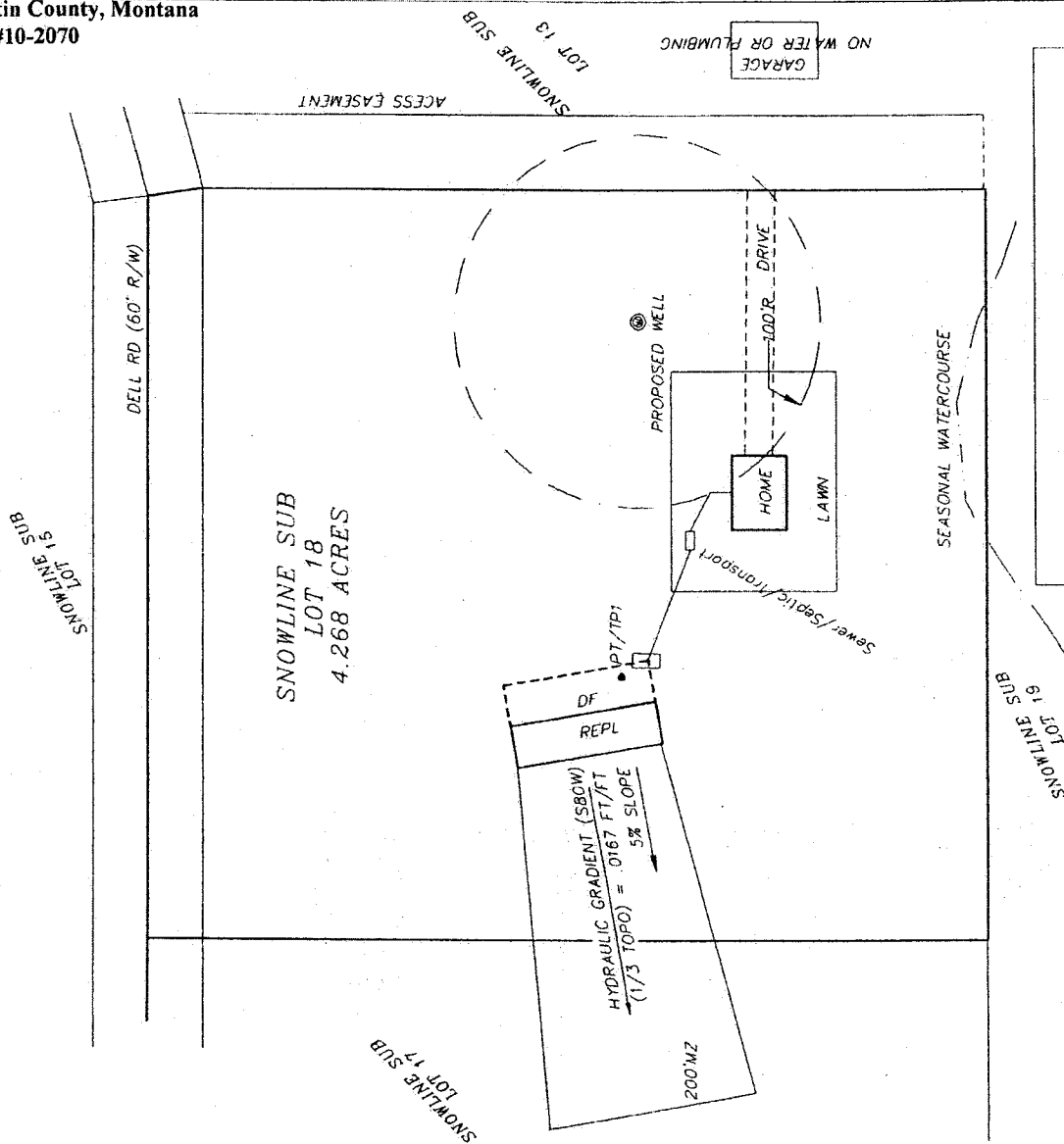
SITE PLAN FOR SNOWLINE SUB
 LOT 18 RSR

NW 1/4 SEC 6, T2S, R7E
 GALLATIN COUNTY, MONTANA



SepTech Inc

BOX 6232, BOZEMAN, MT 59711: 599-3164
 PROJECT: DEQ RSR / 2010083.01
 DATE: 5-19-2010



Reviewed By The Local Reviewing Authority
 Under Contract with the
 Department of Environmental Quality/PCD
 Local Reviewer: Barbara K. Kugler Date: 6/21/10
 Accepted Under Contract: 6/4/2010 Date: 6/4/2010
 DEQ Representative: Barbara K. Kugler Date: 6/21/10
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(COUNTY PERMIT APPROVAL STAMP)

(DEQ APPROVAL STAMP) 2010

EQ 10-2070

MT DEQ PUBLIC WATER
 & SUBDIVISION BUREAU

5/1/10